Case No.: BY0030P

Page No.: 3

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-19 (canceled).

Claim 20 (new). A compound of formula [I]

$$Ar \xrightarrow{N} O \xrightarrow{R^4} R^2$$

$$R^3 \longrightarrow R^2$$

$$R^1 \qquad [I]$$

wherein:

each R¹ and R² are independently selected from the group consisting of:

- (1) hydrogen
- (2) halogen
- (3) C_{1-6} alkyl
- (4) C_{3-8} cycloalkyl- C_{0-4} alkyl
- (5) C₁₋₆ alkylamino
- (6) di-C₁₋₆ alkylamino
- (7) C₁₋₆ alkylcarbonylamino
- (8) C_{1-6} alkylcarbonyl-(C_{1-6} alkyl)amino, and
- (9) 3 to 8-membered heterocycloalkyl-C₀₋₄ alkyl,

wherein the C_{1-6} alkyl moiety may be substituted with R^5 , the cycloalkyl or heterocycloalkyl moiety may be substituted with R^6 , and R^1 and R^2 are not hydrogen at the same time, or

 R^1 and R^2 together form -(CH₂)_m-, m standing for an integer of 3 – 6, wherein 1 or 2 hydrogen atoms constituting methylene may be substituted with R^6 ;

R³ is hydrogen, halogen, C₁₋₆ alkyl or C₁₋₆ alkyloxy;

 R^4 is hydrogen or C_{1-6} alkyl;

each R^5 is independently selected from the group consisting of halogen, cyano, hydroxyl, amino, optionally fluorine- or hydroxyl-substituted C_{1-6} alkyl, mono- C_{1-6} alkylamino, di- C_{1-6} alkylamino, optionally fluorine-substituted C_{1-6} alkyloxy, C_{1-6} alkyloxy- C_{1-6} alkyloxy- C_{1-6} alkyloxy-carbonyl, C_{1-6} alkyloxy-carbonylamino, C_{1-6} alkyloxy-carbonyl-(C_{1-6} alkyloxy-carbony

Case No.: BY0030P

Page No.:

 C_{1-6} alkylcarbamoyl- $(C_{1-6}$ alkyl)amino, carbamoyloxy, mono- C_{1-6} alkylcarbamoyloxy, di- C_{1-6} alkylsulfonyl, C_{1-6} alkylsulfonylamino, C_{1-6} alkylsulfonyl- $(C_{1-6}$ alkylsulfamoyl, mono- C_{1-6} alkylsulfamoyl, sulfamoylamino, mono- C_{1-6} alkylsulfamoylamino, mono- C_{1-6} alkylsulfamoyl- $(C_{1-6}$ alkylsulfamoyl- $(C_{1-6}$ alkylsulfamoyl- $(C_{1-6}$ alkylsulfamoyl- $(C_{1-6}$ alkyl)amino, di- $(C_{1-6}$ alkylsulfamoyl- $(C_{1-6}$ alkyl)amino and pyridone;

 R^6 is R^5 or oxo;

W is:

- (1) linker (single bond),
- (2) mono- or bi-cyclic, 3 to 8-membered aromatic or aliphatic heterocyclic group,
- (3) mono- or bi-cyclic, 3 to 8 membered aromatic or aliphatic carbocyclic group,
- (4) C_{2-4} alkylene in which the carbon in the main chain may be substituted with oxygen, or
- (5) C_{2-4} alkenylene in which the carbon in the main chain may be substituted with oxygen,

wherein those substituents in above (2) through (5) may be optionally substituted with R⁵; and

Ar is an optionally R⁷-substituted aromatic carbocyclic group or aromatic heterocyclic group, said aromatic carbocyclic group or aromatic heterocyclic group selected from the group consisting of:

- (1) phenyl,
- (2) naphthyl,
- (3) pyridinyl,
- (4) pyrimidinyl,
- (5) pyridazinyl,
- (6) pyrazyl,
- (7) pyrazole,
- (8) pyrrolyl,
- (9) imidazolyl,
- (10) triazolyl,
- (11) oxazolyl,
- (12) isoxazolyl,
- (13) oxadiazolyl,
- (14) thiazolyl,
- (15) isothiazolyl,
- (16) thiadiazolyl, and
- (17) tetrazolyl;

wherein R⁷ is selected from R⁵;

or a pharmaceutically acceptable salt thereof.

Case No.: BY0030P

Page No.: 5

Claim 21 (new). The compound according to Claim 20 of formula [I-1]

$$Ar \xrightarrow{\mathbb{R}^4} \mathbb{R}^{2a}$$

$$R^{1a} \qquad [I-1]$$

wherein:

R^{1a} and R^{2a} are each independently selected from the group consisting of:

- (1) hydrogen,
- (2) halogen,
- (3) C_{1-6} alkyl,
- (4) C_{3-8} cycloalkyl- C_{0-4} alkyl,
- (5) C_{1-6} alkylamino,
- (6) di-C₁₋₆ alkylamino,
- (7) C_{1-6} alkylcarbonylamino,
- (8) C_{1-6} alkylcarbonyl-(C_{1-6} alkyl)amino, and
- (9) 3 to 8-membered heterocycloalkyl,

wherein the C_{1-6} alkyl moiety may be substituted with R^{5a} , the cycloalkyl or heterocycloalkyl moiety may be substituted with R^{6} , and R^{1a} and R^{2a} are not hydrogen at the same time, or

 R^{1a} and R^{2a} together form -(CH₂)m-, wherein m is an integer from 3 to 6, and wherein 1 or 2 hydrogen atoms constituting methylene may be substituted with R^6 ;

each R^{5a} is independently selected from the group consisting of halogen, cyano, hydroxyl, optionally fluorine- or hydroxyl-substituted C₁₋₆ alkyl, optionally fluorine-substituted C₁₋₆ alkyloxy, C₁₋₆ alkyloxy-C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyloxy- carbonylamino, C₁₋₆ alkyloxycarbonyl-(C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyloxycarbonyloxy, C₁₋₆ alkylcarbonylamino, C₁₋₆ alkylcarbonyl-(C₁₋₆ alkyloxycarbonyl, mono-C₁₋₆ alkylcarbamoyl, di-C₁₋₆ alkylcarbamoyl, carbamoylamino, mono-C₁₋₆ alkylcarbamoylamino, di-C₁₋₆ alkylcarbamoyl-(C₁₋₆ alkyloxycarbamoyl-(C₁₋₆ alkyloxycarbamoyl), di-C₁₋₆ alkylcarbamoyl-(C₁₋₆ alkyloxycarbamoyl), alkylcarbamoyl-(C₁₋₆ alkyloxycarbamoyl), di-C₁₋₆ alkyloxycarbamoyl, di-C₁₋₆ alkyloxycarbamoyloxy, di-C₁

R³, R⁴, R⁶, W and Ar are as defined in Claim 20 or a pharmaceutically acceptable salt thereof.

Case No.: BY0030P

Page No.: 6

Claim 22 (new). The compound according to Claim 20, wherein R^1 is C_{1-6} alkyl, C_{1-6} cycloalkyl, C_{1-6} alkylamino, di- C_{1-6} alkylamino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt thereof.

Claim 23 (new). A compound according to Claim 20, wherein R^2 is hydrogen, C_{1-6} alkyl, C_{1-6} cycloalkyl, C_{1-6} alkylamino, di- C_{1-6} alkylamino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt thereof.

Claim 24 (new). A compound according to Claim 21, wherein R^{1a} is C_{1-6} alkyl, C_{1-6} cycloalkyl, C_{1-6} alkylamino, di- C_{1-6} alkylamino or C_{1-6} alkylcarbonyl-(C_{1-6} alkyl)- amino, or a pharmaceutically acceptable salt thereof.

Claim 25 (new). A compound according to Claim 21, wherein R^{2a} is hydrogen, C_{1-6} alkyl, C_{1-6} cycloalkyl, C_{1-6} alkylamino, di- C_{1-6} alkylamino or C_{1-6} alkylcarbonyl-(C_{1-6} alkyl)- amino, or a pharmaceutically acceptable salt thereof.

Claim 26 (new). A compound according to Claim 20, wherein the 3 to 8-membered heterocycloalkyl moiety is selected from the group consisting of tetrahydrofuranyl, tetrahydropyranyl, pyrrolidinyl and piperidinyl.

Claim 27 (new). A compound according to Claim 20, wherein R³ is hydrogen, methyl or methoxy, or a pharmaceutically acceptable salt thereof.

Claim 28 (new). A compound according to Claim 20, wherein R⁴ is hydrogen or methyl, or a pharmaceutically acceptable salt thereof.

Claim 29 (new). A compound according to Claim 20, wherein W is selected from the group consisting of 1,2-dimethylene, 1,4-phenylene, 2-fluoro-1,4- phenylene, pyridin-2,5-di-yl, pyrimidin-2,5-di-yl, pyrazin-2,5-di-yl, 1,4-piperidin-di-yl, 1,2,4-triazol-1,3-di-yl, 1,4-cyclohexylene and oxymethylene, or a pharmaceutically acceptable salt thereof.

Claim 30 (new). A compound according to Claim 20, in which Ar is selected from the group consisting of pyrrol-1-yl, phenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 4-chlorophenyl, 3,4-difluorophenyl, 2,4-difluorophenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-methoxyphenyl, 4-methanesulfonylphenyl, pyridin-2-yl, 3-methylpyridin-6-yl, 2-fluoropyridin-5-yl, 3-fluoropyridin-6-yl, 3-chloropyridin-6-yl, 2-difluoromethylpyridin-5-yl, 3-difluoromethylpyridin-6-yl, 2-methoxypyridin-5-yl, 2-methoxypyridin-6-yl, 3-methoxypyridin-6-yl,

Case No.: BY0030P

Page No.: 7

2-difluoromethoxypyridin-5-yl, 3-difluoromethoxypyridin-6-yl, 3-trifluoromethylpyridin-6-yl, 2-trifluoromethylpyridin-5-yl, 2-pyrimidinyl, 2-pyrazinyl and 3-pyridazinyl, or a pharmaceutically acceptable salt thereof.

Claim 31 (new). A compound according to Claim 20, which is N-(2,3-dimethylimidazo[1,2-a]pyridin-6-yl)-4'- (trifluoromethyl)[1,1'-biphenyl]-4-carboxamide, or a pharmaceutically acceptable salt thereof.

Claim 32 (new). A compound according to Claim 20, which is N-(2-cyclopropyl-3-methylimidazo[1,2-a]- pyridin-6-yl)-4-(2-pyridyl)benzamide, or a pharmaceutically acceptable salt thereof.

Claim 33 (new). A compound according to Claim 20, which is N-(2-cyclopropyl-3-methylimidazo[1,2-a]pyridin- 6-yl)-4-(1H-pyrro-1-lyl)benzamide, or a pharmaceutically acceptable salt thereof.

Claim 34 (new). A method for producing a compound according to Claim 20 of formula [I] which comprises the steps of:

(1) amidating a compound represented by a general formula [II]:

wherein Ar and W are as defined in Claim 20, with a compound represented by a general formula [III]

$$H_2N$$
 R^2
 R^1 [III]

wherein R¹, R² and R³ are as defined in Claim 20; and

(2) condensing, where R⁴ is not hydrogen, the compound as obtained in the above step with a compound represented by a general formula [IV]

Case No.: BY0030P

Page No.:

 $R^4 - X_1$ [IV]

wherein X_1 is a leaving group and R^4 is defined in Claim 20.

Claim 35 (new). The method of treating a disease mediated by the melanin concentrating hormone receptor comprising administering to a patient in need of such treatment a therapeutically effective amount of a melanin concentrating hormone receptor antagonist compound according to Claim 20, or a pharmaceutically acceptable salt thereof.

Claim 36 (new). The pharmaceutical composition comprising a compound according to Claim 20, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

Claim 37 (new). The method of treating or preventing a melanin concentrating hormone mediated disease selected from: metabolic disorders represented by obesity, diabetes, hormone disorder, hyperlipidemia, gout, fatty liver, hepatitis and cirrhosis; cardiovascular disorders represented by stenocardia, acute or congestive heart failure, myocardial infarction, coronary atherosclerosis, hypertension, renal diseases and electrolyte abnormality; central nervous system or peripheral nervous system disorders represented by bulimia, emotional disturbance, depression, anxiety, epilepsy, delirium, dementia, schizophrenia, attention-deficit hyperactivity disorder, memory impairment, sleep disorders, cognitive failure, dyskinesia, paresthesias, smell disorders, morphine tolerance, drug dependence and alcoholism; reproductive disorders represented by infertility, preterm labor and sexual dysfunction; digestive disorders; respiratory disorders; cancer or pigmentation, comprising administering to a patient in need of such treatment or prophylaxis of a therapeutically or prophylactically effective amount of a compound according to Claim 20, or a pharmaceutically acceptable salt thereof.

Claim 38 (new). The method of preventing or treating obesity in a patient in need thereof comprising administering to said patient a therapeutically or prophylactically effective amount of a compound according to Claim 20, or a pharmaceutically acceptable salt thereof.